STRITCH SCHOOL OF MEDICINE
of
LOYOLA UNIVERSITY
706 South Wolcott Avenue
Chicago 12, Illinois

Aug. 16, 1955

Dr. Joshua Lederberg
Dept. of Genetics
University of Wisconsin

Dear doctor Lederberg:

I finally got out some cultures for you and am sending them today along with a flagella stained slide of each. My notes are not very detailed as to the relative frequency of bipolar flagellation. I picked from my stock 14 strains which I stained and from these selected the 6 I sent you.

Most monotrichous strains are unipolar. The flagellum on the "daughter cell" does not grow out until separation is more or less complete. This is also largely true of the polar multitrichous types. Among the lophotrichous types it is more common to find the flagella on the daughter cell developing prior to complete separation. On the slide of H-32 and H-37 you will see some apparently single cells with flagella at both ends. More often some cell separation is evident where there is bipolar flagellation.

The motility appeared to be very good in all 6 of the cultures. Plating in semisolid agar and fishing from the periphery of a spreading colony may improve motility and flagellation.

Note that each slide has two smears. The staining is not perfect but by looking at various places on the slide I think you will see what you need.

Sincerely yours
Elinor Leifson